CONDITION

Babies and heat rashes

Learn how to recognize heat rash in babies, what causes it, how to cool and protect the skin, and when a rash or heat-related symptom needs medical care.

WHAT IT IS
Skin reaction caused by trapped sweat

BODY SYSTEM
Skin

MAIN SYMPTOMS
Tiny bumps, mild redness, itching or prickling, irritability

WHAT CAUSES IT
Blocked or irritated sweat ducts

HOW IT IS DIAGNOSED
Skin examination

MAIN TREATMENT
Cooling and keeping skin dry

CAN IT BE CURED?
Yes - usually clears after cooling

IS IT AN EMERGENCY?
Sometimes - reduced responsiveness with overheating

LONG-TERM OUTLOOK
Usually clears without complications

Overview

Heat rash is a skin reaction that develops when sweat becomes trapped under the skin. The medical name is miliaria . It is also called prickly heat or sweat rash.

Babies are especially likely to develop heat rash because their sweat ducts are small and still developing. They also depend on adults to keep their clothing and surroundings at a comfortable temperature. A rash can appear during hot, humid weather, but it may also develop in winter if a baby is overdressed or wrapped in heavy bedding.

Heat rash often affects areas covered by clothing or where skin touches skin. Common locations include the neck, chest, upper back, armpits, groin, diaper area, and folds of the arms or legs. It may also appear on the scalp or face.

Most heat rashes are mild and improve after the baby's skin is cooled and kept dry. Heat rash is not contagious. It cannot spread from one person to another.

A heat rash itself does not usually cause a fever or make a baby seriously unwell. However, overheating and heat-related illness can occur at the same time. It is important to look at the baby's overall behavior, feeding, temperature, breathing, and wet diapers rather than focusing only on the skin.

Symptoms

Heat rash can look different depending on how deeply sweat is trapped.

The mildest form, called miliaria crystallina , causes very small, clear, fluid-filled bumps. They may look like beads of sweat that do not wipe away. The surrounding skin may have little or no redness, and the bumps can break easily.

A more inflammatory form, called miliaria rubra , causes small red, pink, or skin-colored bumps. On darker skin tones, redness may be less noticeable, but the area may look darker, purple, or gray. The skin may feel prickly, itchy, or uncomfortable. A baby may seem fussy or rub the affected area.

Typical features include:

Heat rash usually does not produce large blisters, open sores, widespread peeling, or pus. It also should not cause a baby to become difficult to wake, unusually floppy, short of breath, or unable to feed. Those findings may have another cause and need medical assessment.

Other conditions can resemble heat rash. These include eczema, irritation from saliva or skin products, diaper rash, yeast infection, bacterial infection, insect bites, and some viral illnesses. A clinician can help when the appearance or cause is unclear.

- Tiny bumps or shallow blisters in a warm or covered area
- Mild redness or skin-color changes around the bumps
- Itching, prickling, or irritability
- A rash that appears after sweating, bundling, or time in a hot environment
- Improvement after the skin is cooled and allowed to dry

Causes and risk factors

Sweat normally travels through tiny ducts to the skin's surface, where it evaporates and helps

cool the body. Heat rash develops when these ducts become blocked or irritated. Sweat then leaks into the nearby skin and produces bumps or inflammation.

Several factors can increase the chance of heat rash in a baby:

Babies who were born prematurely may be more prone to heat rash because their skin and sweat ducts are less mature.

Heat rash does not mean that a baby has been neglected. It can develop quickly, even when caregivers are attentive. The goal is to notice overheating early and adjust the baby's clothing or environment.

- Hot or humid weather
- Too many clothing layers, blankets, or tight swaddling
- Thick, nonbreathable clothing
- Fever or an illness that causes sweating
- Skin-to-skin folds that remain warm and damp
- Long periods in a car seat, carrier, or stroller where heat cannot escape easily
- Heavy ointments or oils that hold heat and moisture against the skin
- Bandages or medical equipment covering part of the skin

Diagnosis

A healthcare professional can usually identify heat rash by examining the skin and asking about recent heat, sweating, clothing, fever, or product use. Laboratory tests are generally not needed.

The clinician may consider:

In an unusual or persistent case, a clinician may examine a skin scraping or take a small sample of skin. This is rarely necessary for a typical heat rash.

Take clear photographs if the rash changes before an appointment. Photos taken in natural light can help show its original appearance. Do not delay urgent care to take pictures.

- Where the rash began and whether it is spreading
- Whether the bumps are clear, red, crusted, or filled with pus
- Whether the baby has a fever, poor feeding, or other symptoms
- Which soaps, creams, oils, detergents, or medicines have been used

- Whether cooling the skin has helped

Treatment and management

The main treatment is to reduce sweating and let the skin cool. A mild heat rash often begins improving within a day or two, although complete clearing may take several days.

Move the baby to a comfortably cool, well-ventilated space. Remove extra blankets and clothing layers. Dress the baby in lightweight, loose-fitting clothing made from breathable fabric. Check the chest or back rather than the hands and feet when judging whether the baby feels too warm, since hands and feet may normally feel cooler.

A lukewarm or cool bath may soothe the skin. Avoid very cold water or ice, which can be uncomfortable and may injure delicate skin. Gently pat the baby dry or allow the skin to air-dry. A cool, damp cloth can also be placed briefly on irritated areas.

Keep skin folds clean and dry. Change wet or sweaty clothing and diapers promptly. When practical, allow short periods without a diaper so air can reach the skin. Make sure the baby is on a safe, washable surface during diaper-free time.

Continue usual breast milk or formula feeding. Offer feeds regularly, especially in warm weather. Babies younger than 6 months generally should not be given plain water unless a healthcare professional specifically recommends it. Ask the baby's clinician about fluids if feeding has decreased or you are worried about dehydration.

Avoid applying thick petroleum products, heavy oils, or greasy ointments to a heat rash unless a clinician has recommended them for another skin condition. These products can trap heat and block sweat ducts. Fragranced products may add irritation.

Do not use loose talcum powder or cornstarch. Airborne powder can be inhaled, and cornstarch may worsen some yeast-related rashes. Do not squeeze or pop the bumps.

Medicines are not usually necessary. A clinician or pharmacist may sometimes recommend a soothing lotion or a short course of an appropriate anti-inflammatory cream when itching is significant. Because babies absorb medicines through their skin more readily than adults, do not use steroid like prednisone or hydrocortisone creams, antihistamines like cetirizine or loratadine , numbing products, or medicated powders without professional advice. Extra care is needed on the face, skin folds, broken skin, and diaper area.

To help prevent another episode:

Follow safe-sleep guidance even in warm weather. Place the baby on their back on a firm, flat sleep surface without loose blankets, pillows, or other soft objects.

- Choose light layers that are easy to remove.
- Keep sleeping and travel areas comfortably cool.
- Never leave a baby in a parked vehicle, even briefly.
- Use shade and take breaks from hot environments.
- Check babies frequently when they are in carriers, car seats, or strollers.
- Avoid covering a stroller with a blanket, which can reduce airflow and trap heat.

Complications

Most heat rashes clear without complications. Scratching or rubbing can occasionally damage the skin and allow bacteria to enter. Possible signs of infection include increasing warmth, swelling, tenderness, pus, yellow crusts, rapidly spreading redness, or red streaks.

Repeated or severe blockage of deeper sweat ducts is uncommon in babies. In rare cases, a widespread rash may reduce the skin's ability to sweat effectively. Medical review is appropriate if the rash is extensive, keeps returning, or does not respond to cooling.

Heat rash is different from heat exhaustion or heatstroke. A baby with heat-related illness may have unusual sleepiness, marked irritability, vomiting, poor feeding, fast breathing, fewer wet diapers, or very hot skin. Heatstroke is an emergency, particularly when overheating is accompanied by confusion, reduced responsiveness, a seizure, collapse, or trouble breathing.

Follow up

Routine home monitoring is reasonable when a baby otherwise seems well, feeds normally, has regular wet diapers, and the rash starts improving after cooling.

Contact the baby's healthcare professional if:

A baby younger than 3 months with a rectal temperature of 38°C (100.4°F) or higher needs prompt medical assessment, even if heat rash seems likely. For older babies, seek timely advice about fever when the child appears unwell or the fever occurs with a concerning rash.

Call emergency services if the baby is difficult to wake, has a seizure, collapses, has severe trouble breathing, develops blue or gray lips or skin, or is very hot and not responding normally. While help is coming, move the baby out of the heat, remove excess clothing, and follow the emergency dispatcher's instructions.

- The rash is not improving after several days in a cooler environment.
- It continues to spread or repeatedly returns.
- The skin becomes painful, swollen, crusted, or filled with pus.
- The baby is feeding less, vomiting, or producing fewer wet diapers.
- You are unsure whether the rash is heat rash.
- The baby has a weakened immune system or another condition that affects temperature control.

Sources

- American Academy of Dermatology Association. "Heat rash: How to spot it and what to do." Public guidance on heat-rash recognition, treatment, and prevention. Accessed February 28, 2025.
- American Academy of Pediatrics. "Heat Rash." HealthyChildren.org Symptom Checker . Patient guidance from the American Academy of Pediatrics. Accessed February 28, 2025.
- DermNet New Zealand. "Miliaria." Clinical overview of the types, causes, diagnosis, and management of sweat-duct obstruction. Accessed February 28, 2025.
- Merck Manual Consumer Version. "Heat Rash." Overview of heat-rash symptoms, diagnosis, prevention, and treatment. Accessed February 28, 2025.
- National Health Service. "Heat rash (prickly heat)." NHS Conditions . Guidance on symptoms, self-care, and when to seek medical advice. Accessed February 28, 2025.
- American Academy of Pediatrics Task Force on Sudden Infant Death Syndrome. "Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment." Pediatrics . 2022;150(1):e2022057990.